

Title (en)
Fluid supply apparatus

Title (de)
Fluidversorgungsvorrichtung

Title (fr)
Dispositif d'alimentation de fluide

Publication
EP 1705345 A1 20060927 (EN)

Application
EP 06004251 A 20060302

Priority
JP 2005081333 A 20050322

Abstract (en)
A fluid supply apparatus includes a fluid pump (30) for supplying a fluid to a fluid supplied portion (100) from a fluid storage portion (20). The fluid supply apparatus further includes a pair of passages (15a, 16) provided between the fluid storage portion and the fluid supplied portion in series with the fluid pump. One of the pair of passages includes a first supply passage (15a) with a check valve (45) therein for preventing the fluid from flowing back to the fluid storage portion from the fluid supplied portion and the other of the pair of passages includes a second supply passage (16) provided in parallel with the first supply passage. The fluid supply apparatus further includes a switching means (40) for switching the second supply passage to a state in which the fluid can flow in the second supply passage.

IPC 8 full level
F01L 1/34 (2006.01); **F01L 13/00** (2006.01); **F15B 21/04** (2006.01)

CPC (source: EP US)
F01L 1/34 (2013.01 - EP US); **F01L 1/3442** (2013.01 - EP US); **F01L 13/0015** (2013.01 - EP US)

Citation (applicant)

- US 6085708 A 20000711 - TRZMIEL ALFRED [DE], et al
- US 6701877 B1 20040309 - OTTERSACH RAINER [DE], et al
- DE 10351940 A1 20040617 - CATERPILLAR INC [US]
- US 5193494 A 19930316 - SONO HIROSHI [US], et al

Citation (search report)

- [XA] DE 10351940 A1 20040617 - CATERPILLAR INC [US]
- [A] US 6701877 B1 20040309 - OTTERSACH RAINER [DE], et al
- [A] US 5193494 A 19930316 - SONO HIROSHI [US], et al
- [A] US 2002104496 A1 20020808 - SAKURAGI SHIGERU [JP], et al
- [A] US 6085708 A 20000711 - TRZMIEL ALFRED [DE], et al
- [A] US 2004222319 A1 20041111 - SCHMIDT THILO [DE], et al
- [A] US 3724294 A 19730403 - GAUS H

Cited by
US2023366334A1; WO2008067935A3; US7681542B2

Designated contracting state (EPC)
CZ DE FR GB

DOCDB simple family (publication)
EP 1705345 A1 20060927; **EP 1705345 B1 20120222**; CN 100436761 C 20081126; CN 1837583 A 20060927; JP 2006266091 A 20061005; JP 4534147 B2 20100901; US 2006213471 A1 20060928; US 7225775 B2 20070605

DOCDB simple family (application)
EP 06004251 A 20060302; CN 200610059889 A 20060321; JP 2005081333 A 20050322; US 36745806 A 20060306